This is a digital copy of a book that was preserved for generations on library shelves before it was carefully scanned by Google as part of a project to make the world's books discoverable online.

It has survived long enough for the copyright to expire and the book to enter the public domain. A public domain book is one that was never subject to copyright or whose legal copyright term has expired. Whether a book is in the public domain may vary country to country. Public domain books are our gateways to the past, representing a wealth of history, culture and knowledge that's often difficult to discover.

Marks, notations and other marginalia present in the original volume will appear in this file - a reminder of this book's long journey from the publisher to a library and finally to you.

Usage guidelines

Google is proud to partner with libraries to digitize public domain materials and make them widely accessible. Public domain books belong to the public and we are merely their custodians. Nevertheless, this work is expensive, so in order to keep providing this resource, we have taken steps to prevent abuse by commercial parties, including placing technical restrictions on automated querying.

We also ask that you:

+ *Make non-commercial use of the files* We designed Google Book Search for use by individuals, and we request that you use these files for personal, non-commercial purposes.
+ *Refrain from automated querying* Do not send automated queries of any sort to Google's system: If you are conducting research on machine translation, optical character recognition or other areas where access to a large amount of text is helpful, please contact us. We encourage the use of public domain materials for these purposes and may be able to help.
+ *Maintain attribution* The Google "watermark" you see on each file is essential for informing people about this project and helping them find additional materials through Google Book Search. Please do not remove it.
+ *Keep it legal* Whatever your use, remember that you are responsible for ensuring that what you are doing is legal. Do not assume that just because we believe a book is in the public domain for users in the United States, that the work is also in the public domain for users in other countries. Whether a book is still in copyright varies from country to country, and we can't offer guidance on whether any specific use of any specific book is allowed. Please do not assume that a book's appearance in Google Book Search means it can be used in any manner anywhere in the world. Copyright infringement liability can be quite severe.

About Google Book Search

Google's mission is to organize the world's information and to make it universally accessible and useful. Google Book Search helps readers discover the world's books while helping authors and publishers reach new audiences. You can search through the full text of this book on the web at `http://books.google.com/`

VIN MARIANI

ERYTHROXYLON COCA.

LANE MEDICAL LIBRARY STANFORD
2 45 0061 7789

U666
C6M2
1884

Mariani + company

VIN MARIANI,

ERYTHROXYLON COCA.

ITS USES IN THE TREATMENT OF DISEASE.

SECOND EDITION.

LANE MEDICAL LIBRARY
14857
SAN FRANCISCO

PARIS:
MARIANI & CO., 41 BOULEVARD HAUSSMANN.
LABORATORY, NEUILLY-SUR-SEINE.

NEW YORK:
19 EAST 16TH ST., BET. BROADWAY AND FIFTH AVE.

LAKE LIBRARY

Entered according to Act of Congress, in the year 1884, by
MARIANI & CO., PARIS AND NEW YORK,
In the Office of the Librarian of Congress at Washington, D. C.

C6M2
1884

PREFACE.

THE treatise which is herewith submitted to the medical profession of America, is the second edition of a pamphlet translated from the French, containing the natural history, chemistry, physiological effects, and therapeutical uses of Erythroxylon Coca. The first edition, comprising 15,000 copies, being exhausted, although supplied to physicians only, and mainly at their own request, we take great pleasure in issuing the present volume for gratuitous distribution to those who make application for the same; it must be distinctly understood that we confine our advertisements entirely to the channels recognized and approved of by the medical profession.

MARIANI & CO.,
PARIS AND NEW YORK.

"Tonics are prescribed in cases of Dyspepsia and Anemia, but patients affected with these diseases almost invariably suffer from constipation, which is increased by Iron and Quinine. —Vin Mariani, though more tonic than these two remedies, never constipates."

Since the successful introduction of *Vin Mariani* to the medical profession of the United States, several manufacturing druggists throughout the country (we know of six in the city of New York) have tried to make their own coca preparation, but in every instance, physicians testing them have pronounced the same very disagreeable to the taste, and not only were they without efficacy, but even caused nausea, vomiting, etc.

Aside from the special ability and care acquired by many years exclusive devotion to this subject on the part of M. Mariani, it is not possible to obtain in the market the leaves as he employs them.

It is to be hoped, that all *conscientious* pharmacists will follow the example of the reliable firm of Dr. Squibb, of Brooklyn, who has omitted Coca from his list, July 1st, 1884, with the explanation: "FLUID EXTRACT COCA OMITTED, BECAUSE IT IS IMPOSSIBLE TO GET COCA OF PROPER QUALITY FOR MEDICAL USE."

CONTENTS.

History, - - - - - - 7
Botanical, - - - - - - 10
Erythroxylon Coca Plant, - - - 11
Culture, - - - - - - 12
Harvesting, - - - - - 13
Extracts of Coca, - - - - - 14
Alkaloids of Coca, - - - - 15
Citations from Authors, - - - - 15
Coca in Therapeutics, - - - - 19
Medical Journals, - - - - - 21
Scientific Books, - - - - 32
Opinion of Physicians, - - - - 40
A Few Letters, - - - - - 43

VIN MARIANI,

ERYTHROXYLON COCA.

ITS USES IN THE TREATMENT OF DISEASE.

HISTORY.

From the earliest times Coca has been in use in South America. The various authors of books on travel and on European conquests, such as Oviedo, Pedro Cieça de Léon, Zarate, Lopez de Gomara, and others, describe, in glowing colors, the great esteem in which it has always been held by the natives.

It is difficult to judge of the feelings of the men who arrived in an unknown land, dazzled at the sight of a profusion of gold, scattered in palaces, in temples, and even in the most simple dwellings, whose eyes shone with covetousness on seeing so many riches, which they came from so far to take away, and for the conquest of which they would commit the most atrocious acts—acts unworthy not only of Christians, but even of barbarians—when they saw that the gold for which they had such savage avidity was almost disdained by the natives, who, instead attached a priceless value to a poor, little, insignificant-looking leaf. What could be the marvellous properties of this leaf, which circulated in place of money among the poorer people, and which truly was in some way a sacred leaf, since it figured

in sacrifices, and was found in temples and on statues of idols? At first foreigners ascribed the belief in its virtues to superstition, but it was not long before they discovered, and were convinced by facts, that the natives were not wrong in placing a high value on Coca.

Invaders conquered and enslaved these people. Not only did they dispossess them of their riches, and torture them to extract more and more gold from them, but they degraded them to be beasts of burden, compelled them to carry heavy, bulky weights over the rugged and steep mountains, and made them even run ahead of their horses, and the unfortunate natives were not overcome by the terrible fatigues, sufficient to exhaust and kill any human being, walking daily long distances, carrying dispatches, running night and day, deprived of nourishment, not even finding on arid rocks water to quench their thirst.

How could they bear such almost superhuman labor, even be cheerful and gay, healthy, and not suffer a moment with prostration? They had in their mouth a small quantity of Coca. They chewed it, and that was sufficient to refresh them, to cheer them, and to give them new strength. They called it "The Divine Plant," attributed to it the most wonderful properties, and did they not seem to be right?

In Peru, under the dynasty of the Incas, Coca was considered as a representation of the Divinity, and the fields where it grew were venerated as sanctuaries. The natives made talismans of the plant; through it they obtained favors of fortune, triumphs in love, the cure of disease, and relief from pain; it made oracles speak, and rendered responses less ominous; its presence in their home kept away all accidents and crime.

None could visit the tomb of his ancestors, or invoke their spirits, if he had not some Coca in his mouth. And all were not deemed worthy to use this precious plant. For a long time it was reserved for the worship of the Divinity and the use of the Incas, those grand monarchs who pretended they were descendants of the gods. None dared chew the sacred leaf unless

some great deed or particular virtue made him worthy to partake of it with these sovereigns. It was the recompense for loyalty, bravery, or some heroic action—a recompense much more prized than gold or silver.

Although the superstitions connected with Coca were gradually dispelled, the plant never lost with the natives of South America its marvellous prestige. They averred that it was Coca alone which, by its strength and extraordinary virtue, gave them patience to support the hard work and cruel treatment which their new masters imposed. But, in the course of time, it was attacked by opponents, who denied its usefulness, who ascribed to it evil properties, and said that the belief of the natives—that by chewing the leaf they were strengthened—was an illusion of the devil; its use was even forbidden, by the second council of Lima, as irreligious.

Since then, however, the authority of a great number of learned men has pleaded for the "Divine Plant." Experience has proved that mountaineers, who use it most freely, are able to perform the hardest work, and, at the present day, the laborers of the whole of South America continue its use. No native would go to work, or undertake a long journey, without having his *chuspa* (a pouch for the purpose) full of Coca leaves, and three or four times a day he sits down, takes the leaves and puts one by one in his mouth, adds to it a little *llipta* (vegetable ashes, or sometimes unslacked lime), making an *acculico* (quid), and continues his course or his work sucking the juice of this beneficial plant.

Nor must it be supposed that the many legends, which are attached to Coca, are altogether as fabulous as they seem; when disengaged from the superstition which surrounds them they only prove the precious virtues of the "Divine Plant." Thus, the natives would not dare to visit the sepulchres of their dead without chewing some leaves of Coca. In point of fact, the exhalations from the tombs of the country are unhealthy, and produce a poisonous action upon the nervous system—an

action efficaciously combated by the tonic properties of the Coca.

Again, it was believed that metals could not be extracted from the mountains if the workmen did not chew the sacred leaf. The truth is, the strengthening juice of Coca gave the miners the necessary energy to strike effective blows; and due consideration of each of the marvellous tales current among the Peruvians might show that the superstitious side is only an exaggeration of the truth. It is certain that, suffering from a lack of substantial food, and forced to perform arduous labor, it is Coca which in part makes up to them the want of nourishment.

The Spaniards, witnessing these extraordinary facts, did not fail to recite them in their narratives, which were eagerly read throughout Europe, and since that time Coca is frequently spoken of, not only in books of travel and history relating to the new world, but in works on natural history, medicine and pharmacy.

BOTANICAL.

Erythroxylon Coca (Lamarck), of the Linnaceæ family, is found in the same equatorial countries where Cinchona (Peruvian bark tree) grows. It is a small tree, from six to nine feet in height, cultivated in the various parts of South America—principally in Peru and Bolivia, Equador, New Granada and Brazil. Its trunk is covered by a rough, generally glossy bark. Its branches, often compressed near the top, bear alternate leaves, very variable in their dimensions, elliptical, and of a green color, darker on the outside than on the inside.

The distinctive character of these leaves is the disposition of their veins, viz.: there are observed by the side of the middle fibre two longitudinal lines jutting out, which separate at the base of the leaf, and meet again at the point, each describing a

ERYTHROXYLON COCA.

slight curve. Its branching root, with oblique divisions, ends in delicate rootlets. Its flowers—small, white or greenish yellow—are found either solitary or grouped in small, scaly cavities. Its fruit is a pericarp, containing a seed in which the embryo is usually surrounded by abundant pabulum.

CULTURE.

A light and silicious soil, a mean temperature of from fifteen to eighteen centigrade, and a certain quantity of moisture, are the essential conditions for the perfect growth of Coca. According to Papig, in the valleys of Chincao and Cassapit, the ground where Coca best flourishes is slanting, relatively steep, but very fertile, composed of brick-red clay, containing probably some iron.

Coca seeds are sown in beds, called "almazigos." The young plants are protected from the heat of the sun's rays by means of straw mats, or woven branches, and are afterward transplanted in furrows about 18 centimetres wide, and 8 deep, about 1 foot apart from each other, the interspaces being planted with maize, which protects by its shade the young plants. Under the beneficial influence of the sun and rain, the growth of the young tree is rapid; it blossoms at the end of from four to six months, and soon yields seed. The Coca tree attains its complete height (two metres and a half on an average) at the end of about five years.

Attempts have been made to acclimatize it in Europe, but so far without success. Frail specimens may be found in the botanical gardens of Paris, London, and other large cities, and also at the establishments of some of the great horticulturists of Belgium. We have given some samples of the plant to the esteemed director of the *Jardin Zoologique d'acclimatation* of Paris, Mr. Geoffroy Saint-Hilaire, who had them placed in the conservatories of the garden, where the public are admitted to see them. Corsica and Algiers seem to possess the climatological

conditions necessary for the perfect development of the Coca, and for that reason it is in these two countries where we shall pursue our efforts of culture.

HARVESTING.

The plant commences to give its first crop at the end of about one year and a half. The gathering must be done in dry weather; it is generally confided to women, and consists simply in detaching each leaf with the fingers. The leaves are collected in aprons, stored with care under awnings or in bags, sheltered from rain and dampness, dried, and then packed. In 1851, the annual production of Coca leaves in Bolivia was estimated to be over 400,000 certos (4,600,000 kilogrammes), of which three-fourths came from the province of Yungas. In 1850 the Bolivian Government collected a revenue from Coca of not less than 900,000 francs; in 1859 the sum went up to 1,500,000 francs.

We quote from Paul Marcoy's "Voyage in the Region of the Titicaca," published in "Around the World," May, 1877: "Of all the valleys of the group of Carabaya, Ituata is the one where the Coca is cultivated on the largest scale. They were then in full harvest; peons and peonnes followed each other through the plantations of that shrub, so dear to the natives that a decree of 1825 had it placed in the coat of arms of Peru, together with the vicugna, and the cornucopia or horn of plenty. Men and women carried, slung over their shoulders, cloths in which were placed the leaves they had gathered one by one. These leaves, spread out on large mattings, were exposed to the sun's rays for two or three days, and then packed up in bags of about one metre in size, and sent over the entire territory. This harvesting of Coca is for the natives of the valleys an occasion of great rejoicing, as is for our farmers their harvest and vintage time. On the day when all the crop is gathered in, both sexes meet, and celebrate it by dancing, drinking, and various sports."

EXTRACTS OF COCA.

In 1774 Dr. Unanue, of Lima, studied, and for the first time, the constituent principles of the Coca leaf. He treated with boiling water 250 grammes of fresh leaves of Coca, and obtained 71 gr. 60 cent. of a gummy, dark-green extract, possessing an agreeable odor, recalling that of the leaf, and a bitter taste, which made a pungent and persistent impression on the tongue.

We have endeavored to verify the results of Dr. Unanue, and, although we experimented with dry leaves, the same quantity (250 grammes) gave us 76 gr. 25 cent. of gummy extract—that is to say, 4 gr. 65 cent. more than the learned doctor of Lima obtained.

Treated with boiling water, with alcohol of 21°, 56°, and 95°, and finally with ether, the Coca leaf, reduced to powder, gave us the following quantities of extract :

1 kilogram.	of Coca,	exhausted	by	boiling water,	gave	305	gr. ext.
1 "	"	"		alcohol of 21°,	"	365	"
1 "	"	"		" 56°,	"	356	"
1 "	"	"		" 95°,	"	210	"
1 "	"	"		sulphuric ether,	"	196	"

The extract obtained by boiling water contains only gummy mucilage, Coca-tannin and chlorophyl, with a very small portion of the bitter principle of the leaf. Coca-tannin is a peculiar tannic acid, which gives a green reaction with iron salts.

The extract obtained by alcohol of 95°, as well as that obtained by sulphuric ether, contains the nitrogenous fatty principles—the resin, the chlorophyl, the tannin, and the alkaloid of the leaf.

The extract obtained by alcohol of 21° and 56° has all the gummy and resinous principles of the Coca leaf, as well as the fatty nitrogenous principles, the tannin, the chlorophyl, and the alkaloid. It is this extract which represents best, and in exact proportion, the *constituent principles of Coca.*

ALKALOIDS OF COCA.

COCAINE.—M. Niemann found in Coca a new alkaloid, which he named Cocaine, with the formula $C^{32} H^{40} N^{2} O^{8}$. One kilogramme of Coca leaves gives about 2 grammes of Cocaine. This alkaloid is bitter, and produces a very decided numbness of the tongue, when brought in contact with this organ. It is yellowish white, and appears in the shape of soft, silky prisms. It is almost insoluble in water, quite soluble in alcoholized water, and very soluble in alcohol and ether.

Cocaine has a very alkaline odor, completely neutralizes acids, and forms with them salts difficult to crystallize.

ECGONINE.—When Cocaine is warmed to 100 degrees in a sealed tube with concentrated chlorohydric acid, it separates into two substances, viz.: benzoic acid, and a new base for which M. Woehler proposed the name Ecgonine (*Ἐξγόνος*, offspring). Ecgonine crystallizes in oblique rhomboid prisms, colorless, shiny, and containing one molecule of water of crystallization. Ecgonine is very soluble in water, less soluble in alcohol, and absolutely insoluble in ether.

HYGRINE (*Ὑγρός*) is a liquid alkaloid which M. Woehler discovered in treating Coca leaves with amylic alcohol. Its odor is like that of trymethylamine; it possesses a strongly alkaline reaction, and its taste is not bitter; its chlorohydrate is crystallizable, but deliquescent; with the bi-chloride of platinum it forms a flaky precipitate.

CITATIONS FROM AUTHORS ON THE GOOD EFFECTS OF COCA.

NICOLAS MONARDES, a doctor in Seville in the sixteenth century, was the first to publish in a book, of which the first edition appeared in Seville in 1565, under the title, "Dos libros, el uno que trata de todas las cosas que traen de las nostras Indias occidentales," an account of the good effects of Coca. The author of "Histoire générale des Plantes," a work published at Lyons

in 1653, gives in vol. 2d, page 745, a French translation of what Monardes said of Coca.

JOSEPH ACOSTA, in his "Natural and Moral History of the East and West Indies," said, in speaking of Coca: "For my part, I am convinced it is not mere imagination, but, on the contrary, I am positive that it gives to the natives their strength and courage—for one can see the effect upon them, as they walk for several days without eating anything, only having with them but a handful of Coca leaves."

LINNÆUS, the celebrated naturalist, said: "Coca possesses the penetrating aroma of stimulating plants, the constrictive and fortifying virtue of astringents, the antispasmodic qualities of bitters, and the nutritive mucilage of vegetable analeptics or aliments."

This leaf, added he, impresses with energy its action upon all portions of the animal economy: "*Olido in nervos, sapido in fibras, utroque in fluido.*"

DR. UNANUE, of Lima, regards it as the most superior tonic ("architonico"). He advises its use in gastric neuroses, and in convalesence to regain quickly the strength lost in sickness.

DON ANTONIO JULIAN wrote: "This plant is a preventive of many diseases, a restorative for lost strength, and likely to prolong human life. It is to be regretted that every poor family cannot be put into possession of this protective against harm from hunger and thirst; that so many employees and workmen lack this help for sustaining their strength in continual labor; that so many old and young people, who apply themselves to the task of study, of composition, and of literary work, cannot enjoy the benefits of this plant against the exhaustion of vital power, the debility of the brain, and feebleness of the stomach, which are inseparable from ceaseless mental effort."

WEDELL considers Coca as a stimulant whose action, slow and persistent, differs entirely from that of alcohol.

According to BOERHAAVE (Inst. Phys., Chap. 68), "Saliva,

charged with the bitter and mucilaginous particles of Coca, carries to the stomach, besides the invigoration, a true nourishing material, which, digested and converted into abundant and nutritive chyle, is introduced into the circulation and metamorphosed into the body of man conformably with the laws of the economy."

MANUEL FUENTES, of Lima, said: "Whatever may be thought of the explanation, the fact is that the human body acquires by the continued use of Coca an athletic constitution, capable of resisting, among privations and misery, the severest fatigue as well as the inclemency of the weather. Experience and scientific analysis reveal to us in Coca the most tonic plant in the vegetable kingdom. This precious shrub unites in itself all the virtues which are separately met with in the large number of vegetables comprised under the general name of TONIC PLANTS."

LITTRÉ and CH. ROBIN, in the "*Dictionnaire de Médicine, de Chirurgie et de Pharmacie,*" say: "Coca leaves, 4 centimetres long, and 27 millimetres wide, are objects of a considerable commerce. A small quantity, chewed by couriers, travellers, miners and work people, sustains them one or two days without solid or liquid nourishment; it pacifies hunger and thirst, and keeps up strength. A greater quantity chewed acts like wine; when mixed with tobacco it has an effect analagous to hashish."

DR. SCHWALK relates a very characteristic case of pneumonia, cured by infusion of Coca, and adds: "From the experience I myself made later, in many cases of primitive acute pneumonia, as well as in cases of consecutive pneumonia, it is my opinion that Coca merits the praises which historians of Peru have given it for centuries. This wonderful plant appeases hunger and thirst, and diminishes the necessity of sleep. It is, in a word, the most powerful restorer of the vital forces. It is destined to occupy a high position in the cure of diseases of the digestive and respiratory tracts."

DR. CH. GAZEAU (" *Thése pour le Doctorat.*" Paris, 1870. Parent. édit. page 61 et seq.) thus sums up the physiological action of Coca : " On the stomach, slight excitation, anæsthesia, and probably an increase of the secretion of gastric juice ; on the intestines, an increase of intestinal secretion, etc. These manifold physiological effects upon the digestive tube unite to produce a specific action, so to say, against the numerous functional troubles, so varied and so little known, of the organs which compose it."

This author cites a great number of clinical observations, in which Coca has NEVER failed to produce an "ADMIRABLE ACTION, SOMETIMES EVEN MARVELLOUS." He concludes (page 65) : "It seems to me useless to present other facts; these suffice to legitimize this very generalized conclusion : COCA IS THE MEDICAMENT PAR EXCELLENCE FOR MALADIES OF THE DIGESTIVE TRACT."

PROF. O. REVEIL terminates his article on Coca by saying: " Much still remains to complete the physiological and clinical study of Coca. It is known that it acts upon the sensory and motor nerves. THIS SUBSTANCE WILL SOME DAY HAVE AN IMPORTANT POSITION IN THERAPEUTICS."

The physiological action of Coca has been very well described by PROF. SÉE, who classifies it among " DISASSIMILANTS."

DR. CH. FAUVEL prescribes it daily with much success in his clinique for Laryngoscopy, under the form of "Mariani Wine of Coca," and prefers it to quinine in many sicknesses, especially in the affections of the respiratory and vocal organs. We asked one day of Dr. Fauvel what had given him the idea of employing Coca in maladies of the larynx at a time when nobody in France had thought of its use. "It is quite a little story," replied the doctor. "About twenty years ago, one of my old friends, then a curé of Bondy, the learned Abbé Pullez—philosopher, poet and naturalist, always spoke to me of the marvellous effect of Coca in weakness of the voice, and assured me that every time he had to preach a long sermon he took Coca for

two days before, and obtained thus a sonorous and increased volume of voice."

Owing to the persistence of these affirmations, Doctor Fauvel did not hesitate to experiment upon patients afflicted with weakness of the voice, and soon became convinced that his friend had made him discover a medicament that could justly be called *a tensor of the vocal cords.*

PROF. GUBLER (*Commentaires thérapeutiques du Codex,* art. Coca) thinks that, like tea, cafeine and theobromine, Coca carries to the nervous system the strength which it possesses in the same manner as a *fulminate,* with the difference that Coca gives it slowly and not all at once.

A. DECHAMBRE (*Dictionnaire Enyclopédique de Sciences médicales,* art. Coca) says: "The theory of *fulminates,* as conceived by M. Gubler, corresponds so well to observed phenomena, that Mantegazza, without generalizing in any way, and without pretending to formulate a theory, but limiting himself to describing what he had seen, and thus drawing a picture more real perhaps than he himself thought, writes: "Under the influence of Coca it seems as if new strength is gradually introduced into our system like water into a sponge."

COCA IN THERAPEUTICS.

In spite of the high encomiums upon Coca, expressed in the foregoing citations, and by many other authors, this medicament has not been used by physicians generally until comparatively recently.

Why was it, with the incontestibly useful properties of Coca, that it took so long before it was regularly introduced into therapeutics? Two powerful reasons have caused this. The first was, that the South American conquerors, and the authors who first mentioned the subject of Coca, exaggerated its beneficial effect to a very great extent, whereupon scientific men and modern practitioners, in order to guard themselves against this

exaggeration, fell into the opposite extreme, and made the great mistake of putting aside a valuable remedy without any examination; the second reason consisted in the defectiveness of all the specimens of Coca in the market—a defectiveness which arose in part from the poor quality of the leaves imported, and in part from the unreliable methods of preparation employed.

A rigorous clinical experience of such authorities as Gubler, G. Sée, Dechambre, and Fauvel in France, Serge Botkin in Russia, Morell Mackenzie and Lennox Browne in England, Zawerthal, Massei, and Cozzolino in Italy, and Elsberg in the United States of America, has determined the real effects of Coca in disease, and, dispelling all idea of exaggeration, has removed the first of these reasons. The head of the firm of Mariani & Co. has triumphed over the second by importation and careful selection of leaves, and the superiority of his preparation of Coca.

The Paris Academy of Sciences and Medicine, under the superintendence of the well-known PROFESSOR BÉCLARD, have thoroughly tested all Coca preparations, and have published as their opinion that M. Mariani is the only chemist able, after life-long study, to extract all the medicinal virtues from the Erythroxylon Coca plant; the Academy and its members now use exclusively Mariani's preparations of Coca for their physiological and therapeutical experiments, and have given to the Wine of Coca his name, it being known to the medical profession of France as "VIN MARIANI," the highest honor which could be awarded him.

The authorities just named have used and now recommend only M. Mariani's preparation, and we transcribe a few extracts from some of the most prominent medical journals, and the judgment of some of the most distinguished members of the medical profession:

Union Médicale, Dec. 5, 1875.

Case of muscular laryngeal weakness, treated successfully with *Vin Mariani.* Observation gathered from the laryngoscopical Clinic of Prof. Ch. Fauvel.

Miss de B——, a lyric artist, aged 22, consulted Dr. Fauvel, April 16, 1869. Tall, and of a good constitution, having no hereditary affliction, the patient complained of a hoarseness, existing about four months, which had resisted all remedies employed until then.

In speaking, the voice was only a little impaired; in singing, the medium notes particularly were produced without purity and without effect. It was remarkable that the higher and the lower notes were relatively good. The laryngoscope demonstrated the mucous membrane of the larynx to be pale and discolored; the inferior vocal cords were as white as in their normal state, but were relaxed, and the most energetic efforts of phonation could not bring them into complete apposition. The patient was considerably anemic and pale. The menses were irregular and very abundant; digestion very bad, and sometimes there was vomiting. The anemic condition amply explained the relaxation of the inferior vocal cords. In fact, there was want of action of the intrinsic muscles of the larynx. The anemia sufficiently explained also harassing fits of coughing, of which the patient complained.

Auscultation of the chest indicated that there was no tuberculosis. The anemic state had already been treated for two months with quinine and iron, but with absolutely no result; only these two remedies had caused a very obstinate constipation. Electricity applied near the course of the recurrent nerves improved the voice somewhat, but did not render it normal in quality. Dr. Chas. Fauvel prescribed Coca in the form of *Vin Mariani* in the dose of two wineglassfuls daily, *without any other medicine.* On the seventh day a decided improvement in the timbre of the voice was noticed, and the patient was able

at the end of a fortnight to resume her singing exercises. Her general condition improved gradually; digestion became regular, her appetite returned, vomiting disappeared, her strength came back, and Miss de B—— noticed that the weariness of which she had complained disappeared. After three months of daily use of Mariani Wine, her health was completely restored, and her voice recovered all its purity.

We have reported this case in all its details to show the advantages the physician can obtain in his practice by the use of this excellent preparation of Coca—*Vin Mariani.*

Revue de Thérapeutic Médico-Chirurgicale, June 11, 1876, Page 381.

A review of "*Dictionnaire Encyclopédique des Sciences Médicales par A. Dechambre.*"

In France Wine of Coca has been much employed as a substitute for quinine, as a tonic. It is accepted for a longer time by the stomach, and is more agreeable to the palate. M. Mariani has contributed largely to the popularity of Coca by his perfect preparation, *Vin Mariani,* which is deservedly the most prominently used.

DR. H. COTTIN.

Gazette des Hopitaux, May 12, 1877.

COCA AND ITS PREPARATIONS.

By Dr. Scaglia, chief physician of the hydrotherapeutic establishment of Plesis-Lalande.

* * * Coca owes its effect to its resinous and nitrogenous ingredients, and to a quaternary active principle.

Cocaine, according to Dr. Rabuteau, crystalizes in small, colorless, inodorous prisms, difficult to dissolve in water, more soluble in alcohol, and very much so in ether.

The first effect of Coca, when it is chewed as leaves, mixed with alkaline powder, which the Indians call *llipta,* or when it

is swallowed in the form of extract, is a notable hypersecretion of saliva, which is followed at the end of a variable time, generally half an hour, by a very pronounced dryness of the throat, accompanied with anæsthesia of the oral and pharyngeal mucous membrane. When the saliva, saturated with Coca, has arrived in the stomach, one experiences a sensation of more or less heat in the epigastric region. At the end of from half to one hour, when the quantity of Coca has been large enough, the pulse is accelerated by eight to ten pulsations per minute, the temperature rises about half a degree, the urea is increased 11 per cent., respiration is quickened, and the breathing becomes more frequent—ranging, say, from 16 to 25 per minute.

From these experimental data, which have been furnished by Gazeau and confirmed by Rabuteau, we can establish the rational indications of Coca. Above all things, Coca is a tonic; it increases the secretion of the gastric juice and that of the saliva; but, as this hypersecretion is but temporary, it is important to take the preparation of Coca about one half-hour before or immediately after meals, for the hypersecretion is followed by a dryness of the mucous membrane, causing anæsthesia, which finds its use in certain painful affections of the stomach, but which at the beginning of digestion would be more hurtful than useful.

Now, in what cases is this tonic action most applicable? Without doubt in anemia and chlorosis.

In anemia, connected with chronic pulmonary affections without fever, and in anemia accompanied by gastralgic pains, Coca will have an excellent effect. The stimulating properties of Coca can also be admirably utilized in those intermediate states of impaired health which are not yet anemia, but must in the end become so—the cerebral weakness due to excess of work or pleasure, the exhaustion from which the inhabitants of large cities suffer, from irregularities of diet and imperfect hygiene due to their positions and surroundings.

These are the principal cases in which to prescribe Coca

But there are also others. Dr. Fauvel has made use of its soothing action upon the throat, in granulous angina, where it admirably replaces the yellow plaster, or the caustic applications which often do a good deal of harm; by the use of Coca the feelings of heat and smart, which are the most troublesome symptoms of this so common disease of the throat, are rapidly abated. Coca has stimulating effects upon the cerebro-spinal nervous system which must not be ignored, notwithstanding the exaggerations of the early observers.

Without producing the agreeable hallucinations of hashish and opium, it certainly excites in a measure cerebral activity, as well as muscular activity. Its moderate use is unquestionably of benefit to people of sedentary habits worn out by work, to convalescents who, from a prolonged confinement in bed, have lost muscular strength, to patients suffering with diabetes or Bright's disease, whose muscles have lost their elasticity and vigor.

As Coca is also an element of oxydation and disassimilation, it may be used to reduce obesity—at least as an adjuvant of hygienic treatment undertaken for this purpose. In such a case, as in diabetes, it is important not to use sugared preparations, as these might destroy all the benefits of the medicament. For these the Mariani Wine of Coca is recommended, having given most excellent results.

Having briefly stated the principal properties of Coca, and its rational indications, based upon physiological experiments, we have but one word to add concerning its preparations. The best, most efficacious, and most agreeable of all Coca preparations is, without any doubt, the *Vin Mariani*. To the tonic and stimulating action of the medicament is added that of the wine, which, chosen with care, contains the requisite constituents necessary to dissolve the Cocaine and resinous principles of the leaves.

This wine has an excellent taste, is more tonic and much more easily borne than cinchona wine, and, still better, *never causes constipation.*

One of our confréres says, in the *Revue Thérapeutique Médico-Chirurgicale* (June, 1, 1876) : Mariani's preparation has been prepared with such perfection that it may be affirmed he has greatly contributed to the popularization of Coca, and he deserves the highest honor for the valuable service he has rendered therapeutics.

Gazette des Hopitaux, November 23, 1877.

LOCAL TONICS AND DIFFUSIBLE TONICS.

BY DR. NITARD.

In the last thirty years a considerable reaction has set in against the system of Broussais. Instead of depressing the economy by bleeding, we try to-day to raise it by stimulation and giving tonics.

Unfortunately, tonics do not always realize the physician's desires. The greater part, in fact, such as strychnine, quinine, iron, and their different preparations, have merely a purely local action. They enter the stomach, and increase its functional activity, but never penetrate the system, and as soon as their action on the mucous membrane is exhausted, they are evacuated by the bowels. These tonics—which we shall call local tonics—have considerable inconveniences ; being astringents, they produce a generally obstinate constipation, and this always results in trouble of the digestive functions.

For a tonic to be really useful it should not act locally only on one organ—the stomach—but, entering the circulation, should penetrate to every organ, and revive every function. In a word, tonics should be diffusible.

Some tonics would partly fulfil these conditions, for the tonic ingredients being diffused with alcohol throughout the whole system, there is added to the local action that they exercise upon the stomach a general action which is felt by every organ in the body ; but, like local tonics, these diffusible

have the great inconvenience of possessing astringent properties which produce constipation.

Coca Wine alone forms an exception to this general rule. On this account it has been able to render such immense service to therapeutics, for, while one is obliged sooner or later to discontinue Cinchona and Iron preparations, the administration of Coca Wine, which possesses scarcely any noticeable astringent properties, *may be continued indefinitely without producing constipation.*

We shall not enumerate here the many advantages that can be derived from this medicament in almost all cases of illness from chronic affections, pulmonary disease, laryngitis, diabetes, obesity, and particularly profound anemia, which leaves serious weakness of the general system behind. But we desire to say a few words upon a form of anemia to which the attention of physicians has not yet been drawn—a state of great depression of the economy and marked poverty of the blood, resulting from the abuse of balsams in the treatment of the urinary organs. The number of individuals who, being afflicted with blennorrhœa, etc., are making excessive use of cubebs, copaiba, turpentine, etc., is in fact considerable; it is so great that, out of one hundred young dyspeptics (in France) one can affirm, without fear of mistake, that at least forty are so from the use of these balsams. Likewise, the number of sufferers from uric gravel, whom the prolonged use of large doses of those dangerous drugs, resins and oleo-resins, has rendered dyspeptic and "nervous," is very great.

To relieve these patients, it is necessary, after having administered to them some light laxative, and some preparation destined to strengthen the stomach, to give them, *not iron, not quinine, not a local tonic,* but a diffusible tonic, and one which, at the same time that it, so to say, addresses itself to the local as well as the general state of the system, does not constipate. It is here, then, that Mariani's Wine of Coca is used with the greatest advantage and success, just where all other

tonics fail. It stimulates the functions of the stomach by the small quantity of tannin it contains, and the active principle of the Coca, dissolved in the wine, serves to excite the vitality of each organ, and not without having previously exerted its vivifying action upon the mucous membrane of the stomach itself.

We say "*Mariani's Wine of Coca*" because, to produce the results mentioned, Wine of Coca, besides the selection of the leaves, demands certain conditions of preparation which have not been successfully fulfilled by any other manufacturers of Coca Wine, but which the *Vin Mariani*, containing the soluble extractive portions of 60 grammes of leaves, representing 12 centigrammes of Cocaine, realizes in the highest degree, and therefore we advise the use of this perfect preparation.

Union Médicale, August 11, 1877.

OF COCA AND ITS TRUE THERAPEUTIC PROPERTIES.

On chewing Coca leaves one feels a certain dryness of the throat, yet it produces at the same time a hypersecretion of the salivary glands, and a short while afterward the mucous membrane of the mouth is to a certain extent anæsthetised. On its arrival in the stomach, the secretion of the gastric juice is increased, also the beating of the pulse; the temperature rises about one-half a degree, and the urinary secretion is far from being diminished.

Dr. Rabuteau has found this in patients afflicted with gout, rheumatism and diabetes, and he has also found that, under the active influence of Coca, an increase of urea of about 10 per cent took place. Dr. Chas. Fauvel is another one of the first physicians who has experimented clinically with this plant. In a remarkable work, which he published some time ago, Dr. Fauvel praises Coca very highly in affections of the pharynx and of the larynx, and mentions in support of his recommenda-

tions several observations of granulous pharyngitis which had resisted all kinds of treatment, but which he had completely cured by the use of *Vin Mariani.*

Among all the pharmaceutical preparations of which Coca is the base, we must mention especially the wine prepared by M. Mariani. This skillful chemist has succeeded in so dissolving the active principles of Coca, in a wine which contains already some tannin and traces of iron, that he has made of the whole a tonic "*par excellence.*" This wine is not only agreeable to the taste, but also has the virtue of never constipating; it is, therefore, a thousand times preferable to the different preparations of Cinchona Wine, of which the overrated reputation has fallen considerably since empiricism has taken possession of it.

The *Revue de Thérapeutique Médico-Chirurgicale,* of June, 1876, mentions M. Mariani as one of the principal popularizers of Coca. Wine of Coca, which bears his name, is destined to render valuable service in the art of medicine. Dr. Cintrat, whom science has lately unfortunately lost, has confirmed the statement that Coca could be successfully used in the hygienic treatment of obesity, and for these cases particularly it is requisite to use only "*Mariani Wine of Coca,*" as it contains no saccharine matter whatever. On this account it is applicable also to the treatment of diabetes.

We must conclude from all the clinical observations known to the present day that Coca is strengthening and stimulating; that it acts in a manner that can be called heroic in anemia, chlorosis, and rachitis; and that it is useful to all persons fatigued by study and prolonged labor, in order to restore vim and vigor.

We associate ourselves with Drs. Fauvel, Gazeau, Rabuteau, Cintrat, and many other prominent physicians, in declaring, after many clinical observations, that the *Vin Mariani* is especially efficacious in granulous pharyngitis, tonsillary angina, albuminuria, and diabetes; that it is the most desirable tonic, and

that the stimulating properties on the nervous cerebro-spinal system cannot be ignored. As to the action upon the larynx, we will terminate this article with a phrase of Dr. Charles Fauvel, "Coca is the tensor, *par excellence*, of the vocal cords."

DR. P. COLLIN.

Journal d'oculistique, of Dr. Fano, 1876.

CINCHONA AND COCA.

Experience has shown us that Coca Wine can be much longer tolerated by irritable subjects. We can even say that we have never been obliged to stop its use in broncho-laryngeal affections, which must, with Cinchona Wine, be done frequently. The Coca Wine which we have employed, and which has given us the best results, is that of M. Mariani. The mode of preparation of Coca Wine contributes greatly to its therapeutic value.

DR. COMMANDRÉ.

Sud Médical, 1876.

Both during our Winter stay at Nice and during the watering season at Cauterets, we have always obtained the very best results with M. Mariani's preparations of Coca, in the different affections in which they are indicated.

Medical Examiner, London, December 13, 1877.

Apropos of our recent article upon Coca, one of our correspondents has written to ask our opinion about the advantages of the Coca preparation known by the name of *Vin Mariani*. We have already indicated its special merits, and, we must say, recommend it strongly in cases where Coca is applicable. We

are informed that this wine is used to a large extent by actors and singers in London, as well as in Paris.—*Editorial.*

Traitement Rationnel de la Phthisie Pulmonarie.

By Dr. de Pietra Santa. Paris: Octave Doin, Publisher, 1875, page 394:

"Among the most renowned practitioners of Paris, Péan, Barth, G. Sée and Cabrol, have promptly adopted the different preparations of Coca; Dr. Ch. Fauvel prescribes them in the affections of the respiratory organs. It is also in these maladies that I have occasion daily to advise the use of Coca under the most convenient, most agreeable, and most efficient form, *Vin Mariani.*"

"Thus is realized the prediction of Réveil: 'This substance (Coca) is destined to take an important rank in therapeutics.'"

Les Grandes Industries a L'Exposition Internationale.

By Francis Frank, page 249:

"But it was not sufficient to know the marvellous properties of Coca; it was still necessary, in order to spread its use in Europe, to present it to the public in a convenient and agreeable form. M. Mariani has completely solved the problem. He has invested Coca with its true value, by presenting it in the most pleasant form in his 'Mariani Wine of Coca.' M. Mariani has devoted himself, long and laboriously, to this new medicinal agent, and he will have the honor of always having his name associated with that of the 'Divine Plant.'"

Les Industries Fluviales et Maritimes.

By Octave Lamy, page 115:

"Mariani Wine of Coca is among the products of its kind the most efficient, thanks to the care of M. Mariani in his

choice of the leaves, and the special knowledge he has acquired, by experience, in their preparation. It is therefore not astonishing to see with what favor the preparation of Coca bearing his name is received by savants, physicians, and the public."

At the Sanitary Exposition and Congress of Leamington, the "Mariani Wine" was surnamed "Wine for Athletes," and was awarded a gold medal and a diploma of honor.

Figaro, June 13, 1877.

Vin Mariani is the restorer *par excellence.* It is the king of remedies against anemia, and its effect is certain, no matter what the cause of the anemia may be. It is a tonic which increases the secretion of the gastric juices, produces appetite, and possesses all the virtues of Cinchona Wine without any of its bad properties.

Vin Mariani has the rare advantage of stimulating both the muscular and the cerebral activity. At the same time that it causes the brain to think more at ease it makes the limbs become stronger, and the body is refreshed. This double action is rare, and of benefit to those who are confined for a long time to their beds, or closely occupied with study or room work. The taste of the Coca Wine prepared by Mariani is excellent, which is a point of importance for a medicine prescribed for patients of impressionable lymphatic nature—that is to say, who promptly respond to satiety and disgust.

PIERRE DAX.

Salut Public de Lyon, April 20, 1877.

Thanks to the great labors of M. Mariani, and to the perfection of his preparation, Coca has taken the first rank among the tonics and reconstituents employed in our therapeutics.

Le Gaulois, October 13, 1875, and March 16, 1877.

The reconstructive method in medicine—the only true one, by the by—has become the order of the day.

We mention among the medicaments of this order the most efficacious of all, the *Vin Mariani.* M. Mariani prepares this wine with the leaves of Coca, the most valued plant possessed by the natives of Peru, and it replaces advantageously Cinchona Wine, the inconveniences of which it does not share. Our readers know that we are opposed to "puffing," and we are not engaged in any such practice now, but pay a simple debt of gretitude in recommending a medicament which has restored us to health.

H. NAZET.

To judge by the marvellous effects which *Vin Mariani* produces, the tonic and stimulant properties of Coca are so powerful that it would be fortunate for our anemic population if the efforts at acclimatization of this plant by M. Mariani were crowned with success.

H. NAZET.

EXTRACTS FROM "VOICE, SONG AND SPEECH."

By Lennox Browne, F. R. C. S. Ed., Senior Surgeon to the Central Throat and Ear Hospital, Surgeon and Aural Surgeon to the Royal Society of Musicians, author of "The Throat and its Diseases," "Medical Hints on the Singing Voice," etc; and Emil Behnke, Lecturer on Vocal Physiology and Teacher of Voice Production; author of "Mechanism of the Human Voice," etc., London Ed., William Clowes & Sons, Amer. Ed., G. P. Putnam's Sons, pp. 254, 255:

"We have said that, very exceptionally, a glass of champagne may be allowed, before use of the voice, in cases of extreme and uncontrollable nervousness. We would strongly urge that the instance in which such in-

dulgence may be observed is indeed very rare, and were it not that we have known instances in which this slight and quickly-diffusible stimulant has really been of service, we would not mention it except in the way of caution. Like all artificial stimulation it is a remedy certain to be followed by injurious reaction.

"Much better, as more sure, active, and permanent in its effects, and as attended by a minimum of after-reaction, is the wine known by the name of its introducer, Mariani, of Paris, the active medical principle of which is the Coca leaf, a plant much valued in South America, and other sub-tropical regions, as capable of sustaining muscular strength, and ensuring against fatigue in long journeys through regions and under circumstances in which other food is difficult to be obtained. The repeated testimonies in favor of the effect of this wine on the vocal muscles and respiration of many patients and pupils, and of many very eminent singers and actors, as well as our joint personal experience, is undoubted and most strong."

And again on p. 286:

"We have knowledge of cases of constitutional nervousness in really excellent artists.

"Such individuals are unfortunately handicapped, and have evidently mistaken their profession, so far as its pursuance with comfort is concerned.

"If the encouragement of success fail, we may seek for an actual remedy, and we may find it necessary to allow a glass of *Vin Mariani*, to be taken just before singing."

See "Brain Exhaustion," by J. Leonard Corning, M.D., published by D. Appleton & Co., 1884, p. 78:

"But of all remedies with which I am acquainted, the extract of Coca is the best for dealing with this condition of irritability—not excepting the bromides.

"It has the soothing effects of the latter remedies, but without their characteristic depressing influence. The preparation of Coca, known as 'Mariani's Coca Wine,' is, so far as I know, the best in the market. It possesses the decided advantage of being manufactured from the fresh leaves, which is an indispensable requisite."

On pages 96 and 97, the same author quotes a case in treatment, with excellent results obtained by *Vin Mariani*, and shows the advantages of Coca over the bromides, and says:

"My only desire is to draw special attention to the specific excellence of a remedy which is now beginning to excite the interest of physicians both in this country and abroad."

He continues on pp. 212, 213, 214, praising the *Vin Mariani* over other remedies, showing its great superiority, and says of Coca:

"It is the remedy, *par excellence*, against worry. Besides exercising an invigorating effect upon the cerebral centers, it imparts an indescribable sensation of satisfaction; the drug, however, must be pure."

Beverly Robinson, M.D., Professor of Clinical Medicine at the Bellevue Hospital Medical College, New York City; "A Clinical Study of the Action and Uses of Caffeine and Convallaria Majalis as Cardiac Tonics," on p. 1:

"In Coca, also, we have a powerful stimulant to the economy that frequently will strengthen or give tone to the nerves in a rapid manner, that no other drug with which I am familiar can accomplish.

"I have repeatedly felt this effect of Mariani's Wine of Coca on myself when extremely fatigued from overwork or want of sleep. The Wine of Mariani is, I believe, one of the best preparations on account of the great care exercised by its maker."

"The Pathology and Treatment of Venereal Diseases," fifth edition, by Freeman J. Bumstead, M.D., LL.D., and Robert W. Taylor, A.M., M.D.

In this standard work, held in high esteem by the profession, special prominence is given to the virtues of Erythroxylon Coca as an adjuvant in the constitutional treatment of syphilis, regarding it as one of the most valuable agents at their command. While not claiming that the drug is a specific for syphilis, they say:

"Its marked tonic effect upon the heart, nervous system and capillaries, and its power to invigorate the system, to improve nutrition, and to sustain life, is so great that its use in syphilis, secondary to that of mercury and

the iodide of potassium, is undoubtedly with results which no other agent known to us possesses. It is especially useful in the anemia and cachexia of the secondary period," etc.

They then go on to particularize its great value in "marked debilitated and cachectic conditions."

An interesting observation by Prof. Marius Odin, M.D., Nice (Chevalier of the Legion of Honor, etc.)

"Madame de G——, of Austrian nationality, 25 years of age; married; no children; average constitution; lymphatic temperament; sent for me February 2d, 1884.

"I was struck at first sight with her pallor; her skin and the mucous membrane of her eyelids and lips were quite colorless.

"This young woman complained of weakness and general atony, cephalagia, dizziness, vertigo, tendency to lipotynic, caused by sorrows, sitting up late at night, and general depressing influences. There was gastralgia, with alternate constipation and diarrhœa. Menstruation was irregular, and an abundant leucorrhœa was accompanied with gastralgic exacerbation. Her pulse was weak and depressible; there was a blowing sound with the first heart-beat; very accentuated in the carotids. On auscultation I found weak respiratory murmurs, much prolonged expiration; dry and jerking cough. There was insomnia, and a tendency to night sweats.

"Everything had been tried—tonics of all sorts, arsenic, iron, quinquina could not be borne; hydrotherapeutics had given no results.

"I prescribed for Mrs. de G—— the *Vin Mariani Erythroxylon Coca*, from which I had had much satisfaction on several previous occasions, but which I had never used alone.

"Want of appetite being one of the chief symptoms, and this keeping her general condition at a low ebb, I gave her a few doses of rhubarb, which, however, modified the situation but little. From that time I prescribed the *Vin Mariani* in doses of a claret glassful, morning and evening, a quarter of an hour before meals.

"At the first doses Madame de G—— complained that it increased her dizziness. I assured her that this was a salutary and even necessary first effect of the medicine, and she consented, not without reluctance, to continue the use of the *Vin Mariani*. At the end of eight days there was a notable amelioration. Appetite appeared, food was taken, and the digestive functions were becoming more regular—day by day. I then advised the patient to increase the dose of *Vin Mariani* by two more glasses per day

either after the meals or between—whenever she had to undergo some exceptional fatigue.

"Madame de G ——, who has since then resumed her daily occupations, tells me that, thanks to the medicament, taken at proper times, she can bear, without fatigue, long conversations, and, at the same time, her vocal powers have acquired an ampler development. At the end of a month's treatment, her state was most satisfactory; there remained a slight blowing with the first heart-sound, which, however, was disappearing, and was not at all perceptible in the carotids any more.

"This observation seemed to me very interesting and conclusive in this respect, viz.: that it shows the action of the *Vin Mariani* when administered without any other medicament, and, what is no less interesting, it shows its useful effects upon the vocal organs—a fact first determined by the eminent specialist, Professor Charles Fauvel, who has given to it the name of 'Tensor of the Vocal Cords.'"

Vin Mariani in the Treatment of Morphiomania; Reported by Dr. Villeneuve, Paris.

"I wish to inform you of the results I have obtained with *Vin Mariani* in three cases of inveterate morphiomania of many years standing. I am not aware that this affection, deplorable in so many ways, has ever been treated with *Vin Mariani*. It is on this account that I decided to publish this article, and trust it may be read by many of my confréres.

"I have had occasion to observe numerous cases of morphiomania, in especially some parts of the United States, where that affection reigns since a long time among the rich classes of the Creole population in the South, and among physicians who, following the example of their confréres of Germany, resort too often to morphine to create a fictitious strength or peculiar sensations.

"I must admit that among the morphiomaniacs whom I treated during my travels, and in France, I obtained real cures only with those who had been addicted to the poison for but a few months, and who did not as yet need comparatively very large daily doses.

"During the last three months I have been treating three subjects of the morphine habit, recommended to me by friends who had abandoned the idea of curing them. I shall only speak of one of them—the most interesting case.

"He is a young man of 32 years, formerly a brilliant lawyer, but reduced w[illegible] him to a frightful state of physiological misery. Five years [illegible] to use morphine preparations as a resource against a very alarm-

ing chronic bronchitis and granulations in the throat, which were irritated constantly by cigarette smoking. The patient at first only used morphine pills, but his physicians committed the imprudence to treat him with some solution of the alkaloid and a Pravaz syringe. A notable change for the better was produced during the first month, but, unfortunately, abuse succeeded promptly to the use of the medicament—so much so that, when I commenced to treat the patient, he was taking daily from 1 gramme 50 centigrammes to 1 gramme 80 centigrammes of morphine in hypodermic injections. You can easily imagine the state in which he was from such excesses. When he was four hours without his dose, there was insomnia, hallucinations, and delirium; constipation during (sometimes) 15 days which brought on in the Spring a very alarming perityphlitis, jerking of the muscles, sudden frights, dyspepsia and, at last, frightful congestion of the face whenever a drop of wine or alcohol was ingested.

"After a month of treatment I had succeeded to reduce the daily doses without giving rise to nervous troubles too alarming.

"The physiological functions seemed to awaken again. However, the congestion, and especially the dyspepsia, was very grave, and the cough which had been suppressed by morphine came back again. It was then that I remembered that, during the Winter of 1880, Dr. Chas. Fauvel's assistant, Dr. Coupard, had treated my larynx with a Mariani Coca preparation, which had given me much relief. I submitted my patient (who, in default of his habitual stimulus, was plunged in a semi-coma, from which he could not always be relieved with weaker daily doses of morphine,) to a treatment of *Vin Mariani*, and with phosphate of lime.

"The danger I feared most was a relapse of bronchitis, and that the cough and expectoration might end fatally; but, how glad was I, when I saw that, after the first box of *Pâte Coca*, the cough became less fatiguing, and, after the second one, had disappeared entirely. I then commenced to give the patient small doses of the excellent *Vin Mariani*. At first congestion appeared, but little by little, as digestion became more easy, my unfortunate patient, who, on account of his state of profound anemia, could not stand any table wines, could take first a glass, then two, then three. Now he could go and have his dinner in town, which he had not been able to do for three years.

"Not only does the patient owe his cure to the *Vin Mariani*, associated with phosphate of lime, but he can also, by persevering with the Mariani preparation, allay the cough that for so long fatigued and annoyed him very much. Possessed of a vigor which was unknown to him for a great length of time, he is able now to take his place in society, break courageously

with his habit, and, thanks to a truly good medicament, can escape from the terrible consequences of the morphine.

"The therapeutic means which we have at our disposal give us so many disappointments, that it is pleasant and just to recognize the advantages of so useful a remedy as the *Vin Mariani*, which has the merit of being at the same time *heroic* and *harmless*."

Observation of a case of Chronic Gastritis, Cured by one of the Mariani Preparations of Erythroxylon Coca, by Dr. H. Libermann, Physician-in-Chief of the French Army, etc.

"Mademoiselle Camille Dudon, of Boulogne-sur-mer; age, 60 years; of average constitution; mixed temperament; was afflicted with a chronic gastritis for 30 years, which was indicated by a lack of appetite, sharp pains in the epigastric region, frequent vomiting, and a habitual state of uneasiness, which had caused a great reduction in flesh, and almost a total loss of strength.

"M'lle Dudon was treated by washing out the stomach, by means of the Faucher Syphon. She had become accustomed to this operation rapidly, and had it done regularly every day about noon, when about to take her dinner. The gastritis was slowly getting better under that treatment; the vomiting ceased; strength came back; but one could see at noon every day, after each washing, that she rejected, with the water from the syphon, the milk and coffee and the toast which she had taken in the morning at 7 o'clock. Seeing these ejections, I had the idea of advising M'lle Dudon to take, instead of coffee at her breakfast, Mariani Extract Coca, in doses of a spoonful in a bowl of warm milk.

"Three days after, I ascertained that nothing but *pure* water came from the syphon, consequently that the milk associated with Coca, as well as the toast, had been assimilated.

"To test the effect of the Coca I suspended its use, and had the patient take only the warm milk and toast; but, after the first washing, could again see the presence of the two substances in the water pumped from the stomach with the syphon.

"I then again prescribed the Mariani Coca, and since then the patient has not felt any more the pains which were usual when she took either milk and coffee or pure milk, or any other food, and which rendered her incapable of doing any work at all.

"This observation proved to me not only the digestibility of the Mariani Coca, but also its digestive influence upon such articles of food which would not have been digested in any other vehicle."

Extract from a Letter of Dr. H. Libermann, Physician-in-Chief of the French Army, Member of the Société de Chirurgie, etc., Chevalier of the Légion d'Honneur, concerning another case.

"MY DEAR SIR:

* * * * * "The patient is better; she is even now in full convalescence; she derived much good from the rectal injections, composed of a half-glassful of beef tea, with an addition of two spoonfuls of peptone and a half claret-glass of *Vin Mariani Erythroxylon Coca.* You can indicate this formula in the medical journals as coming from me. It is a new and very useful application of the *Vin Mariani* in cases where the stomach can tolerate nothing, either from the presence of an ulcer or a cancer, and in all cases where patients have to be nourished through the rectum—as they should have done in the case of the Comte de Chambord.

"Paris, April 29, 1884.

"DR. H. LIBERMANN."

The Weekly Medical Review, of St. Louis and Chicago, September 1, 1883, on page 171, has an interesting article entitled, "Coca; its Physiological Properties," by Walter Coles, M. D., St. Louis.

Dr. H. D. Hicks, of Boston, writes as follows regarding the value of Coca:

[*New York Medical Journal.*]

I have used it both personally and in my practice, and find it of great service in the following conditions:

To prevent and relieve fatigue.

In those cases of backache accompanied by a high-colored urine with excessive amounts of urate and uric acid.

In short breathing, dependent upon weakness of the muscles of respiration.

Palpitation of the heart, without valvular lesion, due to dilation or to weakness of the heart-muscle.

It renews the vigor of the intellect and relieves mental exhaustion, rendering the flow of thought more easy and the reasoning power more vigorous.

It dissipates "the blues," leaving the mind calm. By its use the depression following an indulgence in alcoholic liquors is relieved, and it invigorates the exhausted sexual function due to excessive venery.

It destroys the craving for alcohol, and, in small doses, is useful in sick headache and headache resulting from over-exertion.

Its habitual use, as part of the daily diet, conduces to mental clearness and activity, freedom from fatigue aud sound sleep.

OPINION OF PHYSICIANS.

MEULAN, March 17, 1874.

* * * * * I wish to inform you that I have nothing but good results to report in all the cases in which I have employed the *Vin Mariani* in my practice. Yours, very respectfully,

DR. GASTON MARCEL.

PARIS, May 12, 1874.

One of my patients, Lady Superior of a convent in the environs of Paris, affected with a profound anemia, which has resisted all treatment, and which, by the long use of iron and quinine, had become complicated with constipation and gastric disturbance, was relieved of the latter symptoms after twenty days' treatment with *Vin Mariani*, and under the influence of this same medicine her anemia gradually lessened, and in the course of three months disappeared.

DR. LAVILLE.

---

10 RUE CASTIGLIONE, PARIS.

Obliged by professional duties to be continually near sick people, who often do not leave me time to take my meals, I desired to experiment with Coca as an analeptic. My trials have been with *Vin Mariani*, and here is what I have found:

A Bordeaux-glass full of this wine has always sufficed to make me forget hunger and to sustain my strength. I felt a slight warmth and general toning up of the body; the digestion of the meal which followed was always more easy than when I had not taken the Mariani Wine, and, although I had not a sensation of voracious hunger as I had without it, I ate very well, the stomach appearing more robust and more active.

DR. CHAPUSOT.

LA PORTA, February 15, 1877.

Having had such splendid results in my practice with the *Vin Mariani* since a number of years, I counsel you to have your wine tried in London

and New York, for I am persuaded that in all the great centres, where the incessant occupation and the abnormal kind of life led there fatally engender anemia, *Vin Mariani* is able to render the greatest services.

DR. H. CONNEAU,

Member of the Academie de Medicine, formerly Chief Physician of Napoleon III., Emperor of the French, Grand Officer of the Legion of Honor.

PARIS, December, 15 1876.

Since some time I prescribe to my patients *Vin Mariani*, and, in the cases of gastric trouble and anemia, I have had nothing but praise for the results obtained.

DR. CABANELLAS.

M. MARIANI, Paris: LONDON.

* * * * * Since using your wine my digestion is splendid and my strength is returning. Respectfully,

DR. DELFER.

PARIS, January 25, 1876.

M. MARIANI, Paris:

"*Ne pigeat ex plebeis sciscitari si quid ad curationem utile*," said Hippocrates (*in præceptis*), that is to say, *let us not disdain popular remedies.* It was with eagerness that I welcomed in my practice the *Vin Mariani*, based upon Peruvian Coca, a plant so popularly used in its native place. I have proved the efficacy of your preparation, which is at the same time useful and agreeable, in cases of nervous over-excitation with sleeplessness, of uni-lateral headaches, in throat diseases accompanied with pain, in spasms of the stomach with intense thirst, and sometimes in bilious vomiting. By re-establishing the digestive functions, *Vin Mariani* restores the general strength of the organism, and becomes a tonic without having the inconvenience of other medicaments, called tonics, which produce constipation. As the first of all therapeutical rules is, for me, the one well known since Hippocrates, which has been newly brought forward in our days by Hahnemann, under the formula—*Similia similibus curantur*, I think that the efficacy of Coca, in the affections I have just enumerated, is due to the application of the homœopathic law; and the well-known fact, that the natives deceive their hunger and calm the cravings of their stomach by chewing and swallowing a substance which habitually increases the appetite, is a confirmation of my idea.

DR. CONQUERET.

NEW YORK, August 16, 1884.

I have prescribed the Mariani Wine extensively during the last year, and with very favorable results.

Its tonic and stimulant properties are very marked, particularly as mani fested in its action on the nervous and muscular systems. It is well borne by even delicate stomachs. In my experience the weaker and more delicate the subject, the more pronounced its action and the more permanent its effects.

While not a universal panacea for all the ills of life, it is a very valuable therapeutic agent, and certainly possesses most of the properties claimed for it.

E. S. BATES, M.D.
161 E. 31st Street, New York.

NEW YORK, February 5, 1884.

DEAR SIR:—I have examined morphologically your Mariani Wine, and also have tested it on patients, and I can cordially recommend it as being up to its standard, and of utility in cases where wine and Coca are indicated.

Yours very truly, EPHRAIM CUTTER, M.D.

FAYETTEVILLE, N. C., February 21, 1884.

Messrs. MARIANI & Co., New York,

DEAR SIRS:—I find *Vin Mariani* a most excellent—in fact, an indispensable—remedy in nervous debility. A patient of mine, a constant sufferer in this way, experiences *immediate and absolute* relief by the use of Mariani's Wine, while *nothing else* affords him the *least comfort.*

Your preparation of the drug cannot be too highly recommended.

Yours truly, H. W. LILLY, M.D.

A FEW LETTERS.

LONDON, November 9, 1882.

M. MARIANI:

At the special recommendation of Dr. Lennox Browne, of London, I have tested carefully the *Vin Mariani*, and I recognize that its splendid effect upon the voice is extremely satisfactory, and almost instantaneous. For over two years I have tried it, ordering it to my pupils, both ladies and gentlemen, whom I had under my care for the development of the voice, and I have invariably remarked that, whenever they had any difficulty in singing or elocution, the *Vin Mariani* enabled them to continue the lesson, which, without it, would have been utterly impossible. I have thus every

reason to be glad that my attention was called to this remarkable preparation, and am convinced that all artists and orators will welcome it and be happy to adopt it. PROFESSOR EMIL BEHNKE.

BREVOORT HOUSE,
Fifth Avenue (near Washington Square),
NEW YORK, December 5, 1883.

Messrs. MARIANI & Co.,
19 E. 16th Street, New York,

GENTLEMEN:—Madame Valleria has desired me to state that she was greatly benefitted by the using of your wine.

Dr. Morell Mackenzie, of Harley Street, London, W., some years ago (three or four) recommended Madame Valleria in a similar instance to use your wine, and then, as now, she obtained instant and complete benefits from so doing, and, with compliments, I remain

Your obedient servant, R. H. PERCY HUTCHINSON.

PARIS, December 2, 1880.

MY DEAR SIR:—Well! yes; know it, and let me write it to you, though I have frequently told it you. Your *Vin Mariani* is indeed excellent, and equalled by nothing. I drink it, I absorb it, and so also does my family, and we are all deriving so much good from it that I shall never be without it. On my voice it acts like a charm. My friends and brother artists, to whom I have recommended it, drink it regularly and likewise speak in highest terms of the *Vin Mariani*, and I can only say I advise all artists to give it an experiment, and guarantee they will adopt its use and thank you for it, as I do with all my heart.

MELCHISSÉDEC,
Of the Opera.

DEAR M. MARIANI: PARIS, November 12, 1881.

Your wine indeed has again saved me! Upon my arrival at the opera and just before the commencement, when I was to sing, I found I had got a severe attack of aphonia, which has disappeared as if by enchantment after I had taken slowly a glassful of your wonderful *Vin Mariani*. It is to be hoped that all singers will become aware of and utilize the excellent properties of your preparation.

I have tried everything, and never have found anything like it. If the government understood all its duties, it would provide a certain quantity daily for the use of our corps of lyric artists—at all events for all the pupils of the Conservatory of Music.

Gratefully, I am yours, VICTOR CAPOUL,
Of the Opera.

FIFTH AVENUE HOTEL,
August 24, 1884.

DEAR DOCTOR:

We wish to pay a tribute to the excellence of the Mariani Wine.

We invariably use it during our professional labors, and find it very efficient as a tonic which strengthens the vocal organs.

We never travel without it, and thank you very much for recommending us to use it. Yours, etc.,

MR. & MRS. W. J. FLORENCE.

No. 21 FIFTH AVENUE,
NEW YORK, December 10, 1883.

DEAR SIR:—I have had occasion to speak with many of my brother-artists of the *Vin Mariani.* Yesterday I was suffering with a lowering of the voice and determined to take this wine. Well, I can assure you that it gave me immediate relief, and that I shall always make use of this *Vin Mariani* on all occasions that I have any trouble with my voice.

If I had a singing school, I should give to my pupils, as a specific for strengthening the vocal cords, this Mariani Wine.

Accept my most sincere congratulations, and believe me,

Yours faithfully, GIUSEPPE DEL PUENTE.

---

220 W. 38th STREET,
March 20th, 1884.

MY DEAR SIR:—I desire to testify to the excellent effects of the *Vin Mariani.*

Having been for months troubled with nervous prostration, I was delighted to find the wine a most strengthening tonic. It was prescribed for me by my physician.

Recommending it heartily to all who are called upon to endure the fatigues of public life, I am, dear sir,

Very sincerely yours, HENRIETTA BEEBE.

NEW YORK, July 16, 1884.

DEAR SIR:—I have often wished to express to you the wonderful results produced upon my voice by the use of the *Vin Mariani,* prescribed by my physician eighteen months ago.

During my sojourn South I had occasion to use it many times, with marvellous results; when my voice was exhausted from excessive use and so hoarse that not one word out of ten was understood, I would take a sherry-glass full of the *Vin Mariani* and captivate my audience by my *full* and *brilliant* voice, really astonishing myself thereby.

It certainly is invaluable to vocalists and elocutionists—soothing irritation of the throat, and giving strength and brilliancy to the voice. Feeling deeply grateful, I am,

Most respectfully yours, MARG. BOULIGNY.

Messrs. MARIANI & Co., NEW YORK, December 16, 1883.

GENTLEMEN:—I have used your wine during several years, and have found it excellent. I am well satisfied with it, and cheerfully authorize you to use my name.

Very respectfully, E. FURSCH MADI.

MARIANI & Co., MYSTIC BRIDGE, Ct., August 12, 1884.

DEAR SIRS:—I have taken your Wine of Coca since July 24th, as directed by my physician. I am pleased to write you that I have been greatly benefitted by it. My lungs are better, and my general health is in every way improving. I can safely recommend it to my friends as the best tonic I have ever taken. My home physician is so much pleased with the effect of the wine upon me that he has already sent to you for a dozen bottles

Respectfully yours, FANNIE S. WILLIAMS.

ST. JAMES HOTEL,
MARIANI & Co., N. Y. CITY, February 25, 1884.
19 East 16th Street, N. Y. City,

GENTLEMEN:—For several years I have been using various preparations of Coca, and within the last few months, having had my attention called to your *Vin Tonique Mariani*, have been using it.

I think it by far superior to any that I have yet seen, and I have derived great benefit from its use.

Judging it from my own experience, I can and do most heartily recommend it. Yours, etc., EMORY A. STORRS,
Chicago.

The following letter has been received from Miss Juliet Corson, the well-known writer and lecturer on dietetics.

CONTINENTAL HOTEL,
MARIANI & Co., N. Y., AUGUST 25, 1884.

GENTLEMEN:—It affords me great satisfaction to give you the result of my personal experience in the use of *Vin Mariani*.

For the past three years I have, under the direction of my physician, relied upon it in serious emergencies of illness and overwork. It sustains

vitality in conditions of extreme exhaustion, and restores strength more quickly than any other tonic I have used, never causing the least unpleasant reaction.

I have tested it during long journeys, under the pressure of continued physical and mental strain, and have found it unfailing in its good effects. Frequently, when in travelling I have been unable to obtain my regular food, a small quantity of *Vin Mariani* has afforded me satisfactory nourishment.

I am so convinced of its beneficial nature, that I have induced many of my friends to use it, and their experience coincides with mine.

Respectfully yours, JULIET CORSON.

The following is from the eminent Professor J. M. Carnochan, M.D.. of New York, Professor of Surgery, former Surgeon-in-Chief to the State Emigrants' Hospital, Health Officer of the Port of New York, and one of the Commissioners of the Health Department of the City of New York, etc.

M. MARIANI, Paris : NEW YORK, August 29, 1884.

I have for the last eight or ten years often recommended the *Vin Mariani* to patients laboring under abnormal conditions of the system, requiring a mild tonic and stimulating influence, with marked and excellent results. For convalescents, also, I consider it a very useful remedial agent. J. M. CARNOCHAN, M.D.

We have received a number of other letters from physicians who have prescribed *Vin Mariani*, praising it in the treatment of the following affections : Anemia, chloro-anemia, gastralgia, dyspepsia, consumption, difficult convalescence, weakness of the vocal cords, laryngeal granulations, huskiness of the voice, general debility, sequelæ of childbirth, "lymphatism" and scrofula, syphilis, profound depression of the economy, impoverishment of the blood, malarial complaints, etc.

We refrain from publishing here more than the foregoing, except the following, to which we desire to call the especial attention of the medical profession of America as coming from the distinguished professor and throat specialist, Dr. Louis

Elsberg, of New York, who is doubtless well known to his confréres :

Mr. A. Mariani, Paris, October 19, 1880.

Dear Sir :—As a rule I object to having my name used as recommending any special preparation of a drug, for this very easily and frequently leads to abuse; but I am willing to make an exception in your case, and to express at your desire, in writing, my opinion of your Wine of Coca—an opinion with which you are personally well acquainted.

Since my attention has been called to the good effects of your wine by Drs. Morell Mackenzie and Lennox Browne, of London, I have tried it myself, and have observed its use by Dr. Fauvel, in his clinique and in his private practice.

There can be no doubt that, properly used, it is an excellent general tonic; that it has a special beneficial action upon the digestive and respiratory organs, and that, by its stimulation of the nervo-muscular system, it enables persons to undergo physical exertions to which, without it, they would at the time not be equal, and seemingly—certainly so far as I have been able to discover—without consequent reaction of over-fatigue. The latter effect I have particularly observed, as to vocal efforts, in the cases of speakers and singers.

DR. LOUIS ELSBERG,
Of New York.

These letters are a few only of several hundred in our posseesion; but we do not wish to burden members of the profession with too many opinions of others, preferring to have every physician test the *Vin Mariani* on its own merits. We feel confident that by his own personal experience in his practice, he will find that not too much has been said in praise of this excellent medicament.

Respectfully,

MARIANI & CO

LANE LIBRARY

NEW YORK. PARIS.

VIN MARIANI.

FORMULA.—**VIN MARIANI** is the concentrated extractive of the leaf of ERYTHROXYLON COCA, and an excellent special quality of Bordeaux Wine, each bottle containing the medicinal properties of two ounces of the fresh selected leaves, equal to thirty grains, to a wine-glassful.

DOSE.—Usual dose is one wine-glassful, about half an hour before or *immediately after* each meal; for children, half the quantity.

VIN MARIANI supplies exactly what physicians have long felt the need of in their practice—a perfectly reliable, diffusible tonic and stimulant, without any unpleasant reaction; a strengthener of the entire system, the most excellent adjuvant in the treatment of disease. This is asserted on the authority of eminent members of the medical profession of Europe, who have used it for a number of years, with the best of results.

VIN MARIANI nourishes, strengthens, sustains and refreshes. It has been prescribed throughout Europe since **1863**, and is pronounced, by every physician who tests it, as the most agreeable and efficacious of *all tonics* and *stimulants*, very palatable, and borne by the most enfeebled stomach where everything else fails.

VIN MARIANI is well adapted for children and persons in delicate health, and for convalescents, as it sustains life for a long period, and nourishes without any other food or drink, and, above all, having that great advantage and superiority over cinchona, iron, and other so-called tonics, that it essentially strengthens, and may be taken for any length of time without *any* fear of *inflammation* or injury to the *gastric juices*, and *never* causing *constipation*; on the contrary, it *aids* digestion and assimilation, *removing* fatigue and improving the appetite.

VIN MARIANI is used in all Hospitals, Cliniques and Public Institutions in France, and is prescribed and highly recommended by the Medical Profession.

VIN MARIANI,

ERYTHROXYLON COCA.

(MARIANI WINE.)

SOLD ONLY IN BOTTLES WITH CAPSULE COVER AND SEAL, AS HERE REPRESENTED.

MARIANI & CO.,

PARIS, 41 Boulevard Haussmann.

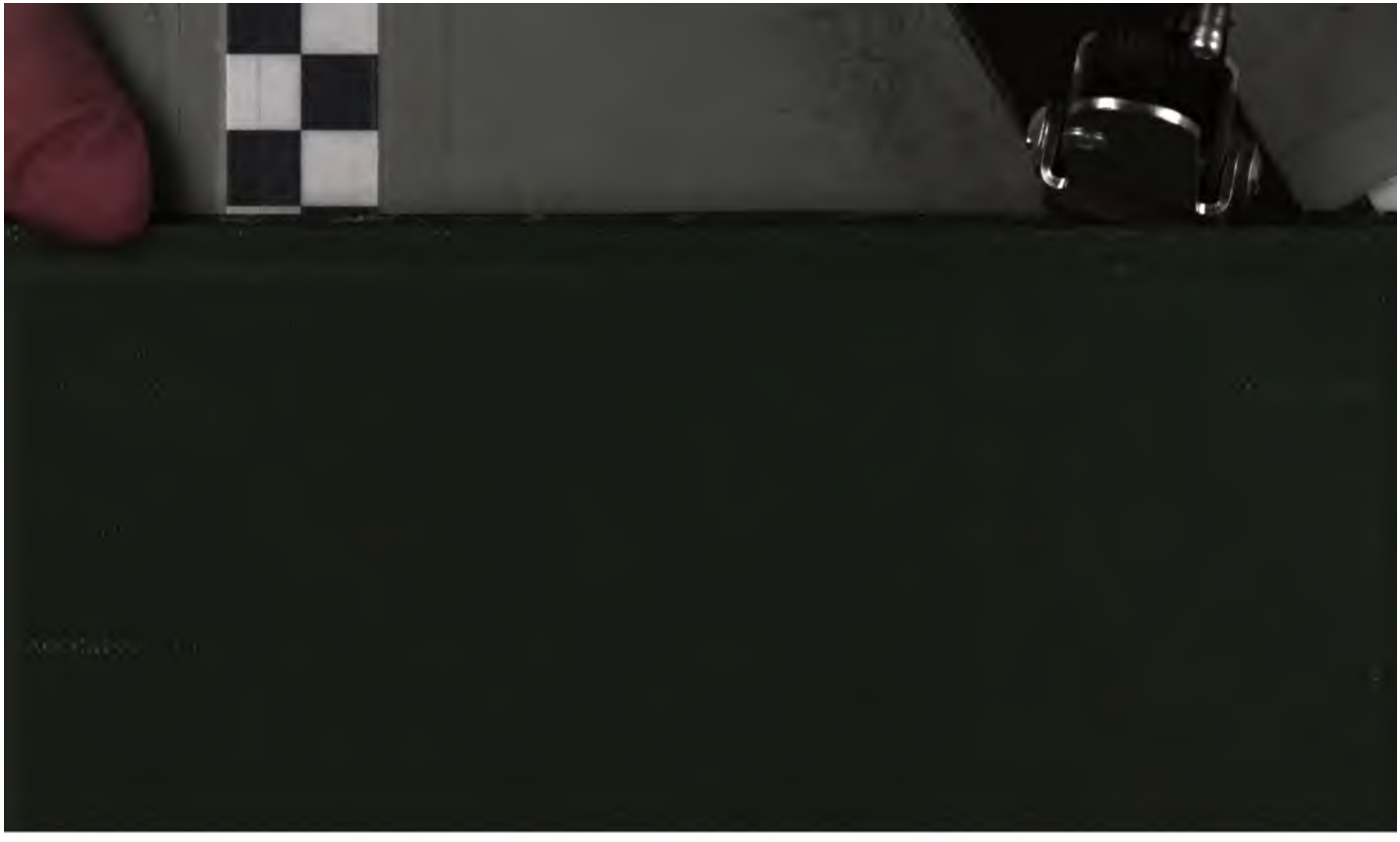
LABORATORY, Neuilly-sur-Seine.

LONDON, 76 New Bond Street.

NEW YORK:

19 East 16th Street, Bet. Broadway & 5th Ave.

VIN MARIANI is obtainable through all first-class pharmacists, or from us direct if ordered in original cases containing 12 bottles. All correspondence will receive our prompt attention.

RARY

be returned on
mped below.